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(71) Applicant *(for all designated States except US)*: **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **VAN DER MEER, Hendrik, H.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **CUIJPERS, Johannes, L.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **HUITSING, Albert, J.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **AALMERS, Mathijs, A., H.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **BAYRAM, Eyup** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: **DUIJVESTIJN, Adrianus, J.**; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

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Declaration under Rule 4.17:

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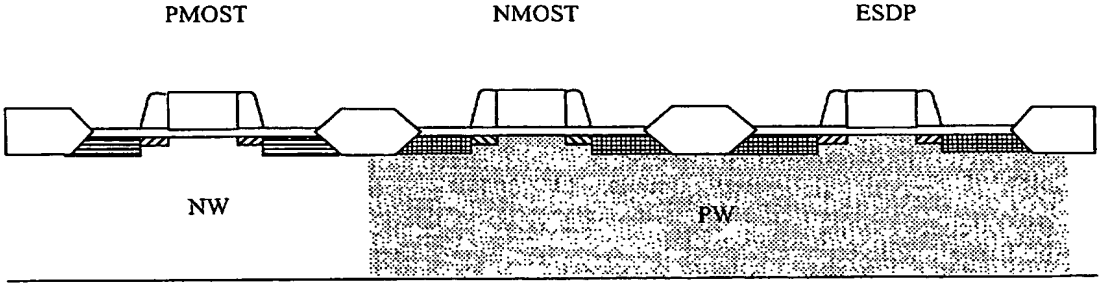
[Continued on next page]

(54) Title: METHOD OF FORMING AN ELECTROSTATIC DISCHARGE PROTECTING DEVICE AND INTEGRATED CIRCUIT ARRANGMENT COMPRISING SUCH A DEVICE



(57) Abstract: A simple and cost-effective method to improve ESD performance by selectively reducing avalanche breakdown voltage in protection devices by means of locally increasing the acceptor dopant concentration. The present invention relates to an integrated circuit arrangement and method of forming on a semiconductor substrate an electrostatic discharge (ESD) protecting device together with internal circuitry to be protected by said protecting device, wherein an offset transistor arrangement is formed in said protecting device, and an acceptor concentration is increased at said offset transistor arrangement so as to selectively reduce the breakdown voltage of the offset transistor arrangement. The lower breakdown voltage causes the protection devices to trigger at lower voltage during an ESD event, thus protecting the more vulnerable regular LDD transistors.

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, INSPEC, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 897 348 A (WU SHYE-LIN) 27 April 1999 (1999-04-27) cited in the application column 2, line 29 - line 63 column 3, line 44 - column 4, line 58 column 5, line 34 - line 45 column 5, line 57 - line 64 figures 1,3,6-8	1-6,10, 11
A	-----	7-9
X	US 6 040 222 A (CHANG YIH-JAU ET AL) 21 March 2000 (2000-03-21) column 2, line 44 - line 63 column 3, line 14 - column 4, line 24 figures 2a-2d	1,2,7-9, 11

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA	Authorized officer
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 744 841 A (JAMISON STEPHEN G ET AL) 28 April 1998 (1998-04-28) column 2, line 47 - column 3, line 9 column 4, line 24 - line 30; figures 3-5	1-3,7-9, 11
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